

February 28, 1973

Publication No. 73-e50

WA-22-4045

State of
Washington
Department
of Ecology



MEMO TO: Ron Robinson

FROM: Ron Devitt *Rd*

SUBJECT: Dredging of Simpson's Pond on Wildcat Creek
at McCleary

Objective: Determine effect of dredging activities on turbidity.

Simpson Timber Company has had a dam on Wildcat Creek at McCleary since the early 1900's. It is used to retain an emergency water supply in case of fire. Water is pumped to a reservoir to supplement the city water supply. Should a serious fire erupt, water would also be pumped from the creek itself.

Periodically, sediment builds up behind the dam and dredging is necessary. The last time dredging activities were conducted, a coincidental fish kill occurred. For this reason, and because the Department of Fisheries was concerned about sedimentation of fish rearing habitat, sequential samplers were set up above and below the dam to monitor the turbidity of the creek.

The upstream sampler (ISCO) was located at the residence about 20 yards west of the McCleary-Shelton highway bridge. The downstream (N-Con) was located at the residence at the end of Ash street. Distance between the two samplers was approximately three-eighths of a mile. Both were programmed to take 250 milliliters each hour. They were initiated on January 22, 1973, and terminated January 30, 1973.

Both samplers were powered by 12 volt DC batteries and I had not used them for such a prolonged time. Problems occurred and a continuous series of samples were not obtained. However, enough (241) samples were taken to effectively determine the effect of the dredging.

Heely and Tibbets hydraulic dredge, the "mud cat" operated sporatically throughout the sampling period. It is not known if they worked the weekend. Spoils were pumped northerly over a small rise to a swampy area and spilled on the forest floor. The pumping rate was 2,000 gpm while underway.

Page Two

**February 28, 1973
Ron Robinson**

The operations were conducted very conscientiously because success in obtaining two other contracts depended on the results of this project.

The weather varied from light snow, rain, and fair. Because the natural conditions of the creek itself due to runoff, the turbidity failed to show any increase due to dredging activities.

**RD/jsg
27/7:8**

**cc: Mike Moorehouse
Department of Fisheries
Mike Price - DOE**

TURBIDITY (JTU) OF WILDCAT CREEK
1-22-73 - 1-30-73

TIME	1-22-73	1-23-73	1-24-73	1-25-73	1-26-73	1-27-73	1-28-73	1-29-73	1-30-73
	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE
	U	U	U	U	U	U	U	U	U
	D	D	D	D	D	D	D	D	D
0000	-	1	7	5	-	1	1	1	-
0100	-	-	8	5	-	1	1	2	6
0200	-	2	5	-	-	1	1	2	9
0300	-	-	10	-	-	1	2	1	5
0400	-	1	7	-	-	1	1	2	9
0500	-	-	5	-	-	1	2	2	6
0600	-	-	8	-	-	1	1	2	10
0700	-	1	3	-	-	1	1	2	5
0800	-	-	5	-	-	1	1	2	8
0900	-	1	8	-	-	1	1	-	-
1000	-	2	-	-	-	1	2	-	-
1100	-	-	-	-	-	1	2	-	-
1200	-	-	9	-	-	1	2	-	-
1300	-	7	7	1	1	-	2	4	-
1400	-	5	9	1	1	-	2	2	-
1500	4	4	10	1	1	2	2	2	-
1600	2	6	5	1	1	2	1	3	-
1700	3	5	3	1	1	1	-	6	-
1800	-	5	3	1	1	1	-	10	-
1900	-	4	4	1	1	1	-	10	-
2000	-	7	4	1	1	1	-	9	-
2100	-	4	5	1	1	2	-	9	-
2200	-	6	4	1	1	2	-	9	-
2300	-	8	4	1	1	1	-	6	-
2400	-	3	4	1	1	1	-	10	-

U = Upstream
D = Downstream